# MPC 42"W Series

42" Full HD Multimedia Panel PC

# **Quick Reference Guide**

1<sup>st</sup> Ed - 3 May 2011

Part No. E201742W5A0R

# 1. Getting Started

## 1.1 Safety Precautions

#### Warning!



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

#### Caution!



Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

#### 1.2 Packing List

- 1 x MPC 42"W Series Panel PC
- 1 x DVD-ROM contains the followings:
  - User's Manual (this QRG in PDF file)
  - Chipset drivers and utilities
  - Gigabit driver and utilities
  - Audio drivers and utilities
  - Video Driver and utilities
- 1 x Packing set includes the followings:
  - 4 x M6 screws



If any of the above items is damaged or missing, contact your retailer.

# 1.3 System Specifications

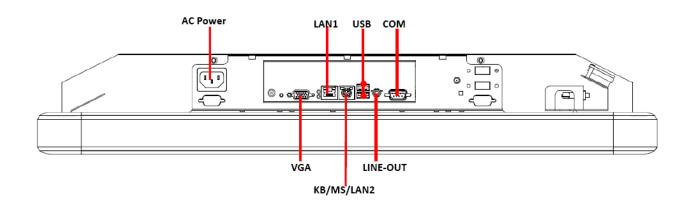
| LCD size Resolution | •  | 16:9                             |  |
|---------------------|--|----------------------------------|--|
| Resolution          |  |                                  |  |
| •                   | FHD, 16.7M   |                                  |  |
| Pixel pitch         | 0.4845mm(H) x 0.4845mm(V)  |                                  |  |
| Luminance           | 450 cd/m²  |                                  |  |
| Contrast ratio      | 4000   |                                  |  |
| Viewing angle       | 89(U), 89(D), 89(L), 89(R)   |                                  |  |
| Response time       | 6.5 ms   |                                  |  |
| Backlight           | 10 x CCFL  |                                  |  |
| System              |  |                                  |  |
| Board               | MPC-42W5 (EBM-PNV)   | MPC-42WA2 (EMX-780E)             |  |
| CPU                 | Onboard Intel® Atom™ D525  | AMD AM2/AM2+ Socket Support      |  |
| CFU                 | Dual-Core 1.8GHz CPU   | Athlon X2/Quad-Core CPU          |  |
| BIOS                | AMI 8 Mbit Flash BIOS  | AMI 2MB SPI BIOS                 |  |
| System Chipset      | Intel® ICH8M Chipset (2.4 W)   | AMD RS780E(13W) + SB710(4.5W)    |  |
| System Chipset      | Intel® ICHow Chipset (2.4 W)   | Chipset                          |  |
| I/O Chip            | Winbond W83627DHG-P  | FINTEK F71863G                   |  |
|                     | Onboard 1 GB up to 2GB & One   |                                  |  |
| System Memory 20    | 00-pin DDR3 SODIMM supports up                                       | Two 200-pin DDR2 SODIMM supports |  |
|                     | to 4 GB DDR3 800 SDRAM   | up to 4 GB DDR2 667/800 SDRAM    |  |
| SSD                 | One CF socket supports Type I / II Compact Flash Card                |                                  |  |
| Hard Driver Bay     | Optional One 2.5"HDD or SSD  |                                  |  |
| WiFi O <sub>I</sub> | Optional Mini PCIe WiFi 802.11b/g/n                                  |                                  |  |
| Watchdog Timer Re   | Reset: 1 sec.~255 min. and 1 sec. or 1 min./step                     |                                  |  |
| H/W Status Monitor  | Monitoring system temperature, voltage, and cooling fan status. Auto |                                  |  |
| thi                 | throttling control when CPU overheats                                |                                  |  |
| Expansion 2         | x Mini PCle  | 1 PCIe x 16, 1 Mini PCI          |  |
| Rear I/O            |  |                                  |  |
|                     | 1 x RS-232/422/485 (selected by jumper)                              | 2 x SATA, 4 x RS-232(COM1 & 2 on |  |
| Serial Port         |  | Edge, COM3 & 4, 10-pin 2.0 pitch |  |
|                     |  | header)                          |  |
| Ethernet            | 1 x RJ-45  | 2 x RJ-45                        |  |
| VGA                 | 1 x DB-15  |                                  |  |
| Audio port          | Line out   |                                  |  |
| USB                 | 2 x USB 2.0  | 4 x USB 2.0                      |  |

#### MPC 42"W Series

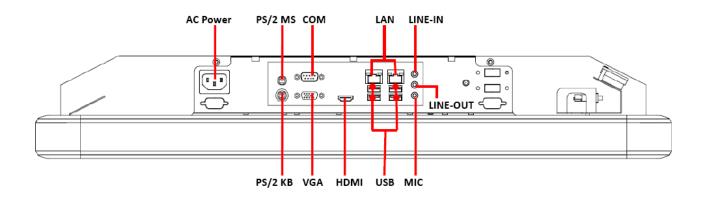
| Speaker                | 2 x 2W   | 2 x 5W  |  |
|------------------------|--|---|--|
| Mouse & K/B            | 1 x PS/2 KB & MS   | 1 x PS/2 KB, 1 x PS/2 MS  |  |
| Display                |  |   |  |
| Chipset                | Intel ICH8-M (2.4W)  | AMD RS780E Integrated ATI Radeon HD 3200 graphics                 |  |
| Display Memory         | Intel DVMT 3.0 supports up to 224MB frame buffer using system memory | IGP ATI Radeon HD3200   |  |
| Resolution             | CRT: up to 2048x1536@ 60 Hz  | CRT Mode: 2560 x 1600@32bpp                                       |  |
| Dual Display           | CRT + LVDS with clone mode   | CRT+HDMI, CRT+LVDS  |  |
| LVDS                   | Dual 18/24-bit LVDS  |   |  |
| Audio                  |  |   |  |
| AC97 Codec             | Realtek ALC888 supports 5.1-CH<br>Audio                              | Realtek ALC888 supports 5.1-CH<br>Audio with 5W AMP               |  |
| Audio Interface        | Mic-in, Line-in, Line-out  |   |  |
| Ethernet               |  |   |  |
| LAN Chip               | Intel® 82574L Gigabit LAN (optional dual 82574L Gigabit LAN)         | Dual RealTek RTL8111D Gigabit<br>LAN                              |  |
| Ethernet Interface     | 10/100/1000 Base-Tx Fast Ethernet compatible                         | 10/100/1000 Base-Tx Fast Ethernet compatible                      |  |
| Mechanical environment |  |   |  |
| System Fan             | n/a  | 2x System Fan, 1 x CPU Cooler with Fan                            |  |
| Color                  | Front & Rear Black; Front<br>Champagne & Rear Black                  | Front & Rear panel Black  |  |
| Mounting               | Wall/Stand/VESA 400 mm x 200 mm                                      |   |  |
| Power Input            | AC 110~220V input  |   |  |
| Power Output           | 24 Vdc /10A (240W)   | 24 Vdc / 6.25A , +3.3V / 14A, +5V / 16A, +12V / 14A, +5VSB / 2.0A |  |
| ACPI                   | r  | n/a   |  |
| Power Type             | AT/ATX   |   |  |
| Operating Temp.        | 32 to 104°F (0 to 40°C)  |   |  |
| Storage Temp.          | -4 to 167°F (-20 to 75°C)  |   |  |
| Operating Humidity     | 5%~90% relative humidity, non-condensing                             |   |  |
| Dimensions             | 1057 x 650 x 105.1mm   |   |  |
| Weight                 | 21.5 Kgs   |   |  |

#### 1.4 System Overview

#### 1.4.1 I/O View (MPC-42W5)



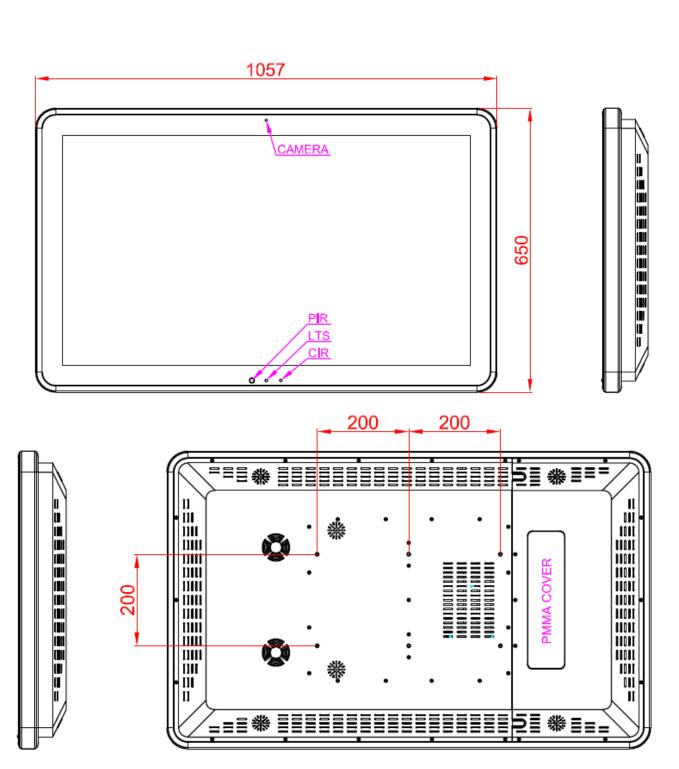
#### 1.4.2 I/O View (MPC-42WA2)



| Function                                | Note  |
|---|---|
| Power-in connector                      |   |
| Serial port                             | DB-9 male connector   |
| Keyboard-Mouse connector                |   |
| Line-in audio jack                      |   |
| Line-out audio jack                     |   |
| Microphone                              |   |
| USB connector                           | Dock USB  |
| RJ-45 Ethernet connector 1              |   |
| RJ-45 Ethernet connector 2 & PS2 co-lay |   |
| Audio Connector                         |   |
| VGA connector                           | DB-15 female connector  |
|   | Power-in connector  Serial port  Keyboard-Mouse connector  Line-in audio jack  Line-out audio jack  Microphone  USB connector  RJ-45 Ethernet connector 1  RJ-45 Ethernet connector 2 & PS2 co-lay  Audio Connector |

## 1.5 System Dimensions





Note: The Web Camera module and intelligent module(PIR/CIR/LTS) are optional device.

(Unit: mm)

# 2. Hardware Configuration

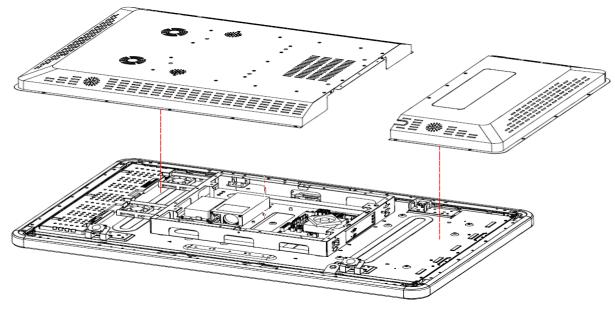


Note: If you need more information, please visit our website:

http://www.avalue.com.tw

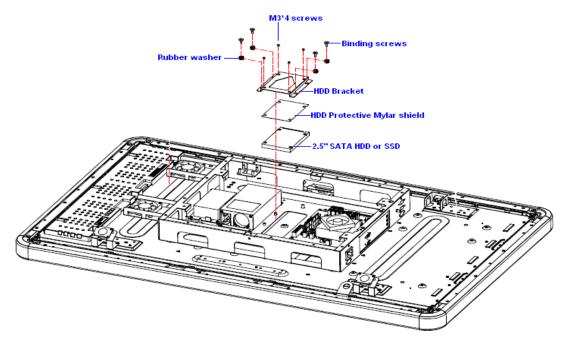
## 2.1 Installing HDD

Step 1: Remove the back of your MPC-42W housing (main cover & Side lid protection for I/O)



Step 2:

Install your HDD into the HDD bracket by means of four M3\*4 screws. Before that; insert the Protective Mylar film between the HDD and the bracket and make sure it is properly installed.



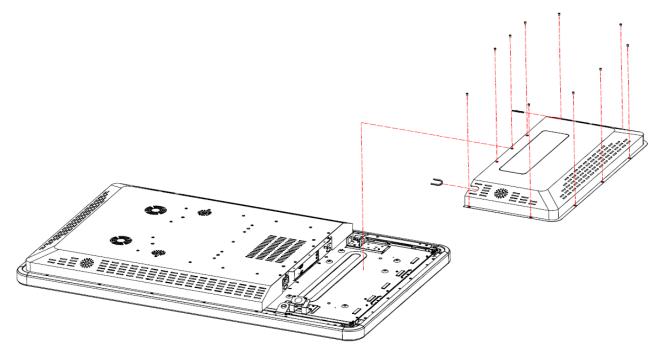
Step 3:

Install the HDD bracket (HDD already attached) in your system by means of four binding screws (shown in above picture) to complete HDD installation.

## 2.2 Cable Management

the side of the I/O protection lid cover.

**Step 1.**Remove the protection lid to disclose I/O & cables location for management.



**Step 2.**Tidily secure electrical, data, and other cables by managing cable trough the hole made on

